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Project Cost: \$160,000

Little Betsie River & Nessen Road Improvement Project

Betsie River Watershed

November 2013 to August 2014

The Betsie River is a State designated Natural River known for salmon & steelhead fishing in Northwest Michigan. The Little Betsie River is a cold-water tributary to the main-stem of the Betsie River and is the largest tributary within the Betsie watershed. The Little Betsie River provides spawning and escape cover for trout, and instream habitat for aquatic insects. The Little Betsie is approximately 12 miles long and this crossing project opens fish passage up to 4 miles of it.

The Nessen road/stream crossing, site #B-12, was an aging concrete bottomless box structure approximately 7½ feet wide over the Little Betsie River. The extremely narrow width created an unnaturally large scour pool downstream and increased velocity flows at the outlet. In addition large amounts of gravel from the roadway were being inputted into the stream along with crumbling material from the structure itself. Through this project partners designed and completed the installation of a 14' wide, 22' span timber bridge that accommodates the natural stream channel and allows the natural movement of substrate, fish and wildlife. Paved approaches and spillways were incorporated to channel road runoff away from the stream as well.

Contributors:

- Grand Traverse Band of Ottawa & Chippewa Indians (through NRCS EQIP Program)
- Benzie County Road Commission
- Upper Great Lakes Connectivity Grant
- National Fish & Wildlife Foundation - Sustain Our Great Lakes Program
- Great Lake Restoration Initiative - U.S. EPA

Location:
Colfax Twp.,
Sections 27 & 28,
Benzie County, MI
N 44.533200°
W -85.878312°



Best Management Practices:

- Single lane timber bridge 14' wide by 22' long installed
- Fieldstone placement for slope stabilization
- Grading & re-vegetation
- Pavement, curbing, & 4 spillways constructed

Project Benefits:

- Restore natural movement of woody debris and sediment upstream & downstream
- Halt tons of sediment delivery into stream from roadbed
- Reduced flooding potential & annual road maintenance
- Reconnect over 4 upstream miles of the Little Betsie River for migratory fish & other aquatic insects
- Ensure safe roadway for vehicle traffic

Partners involved:

Conservation Resource Alliance, Benzie County Road Commission, Michigan Department of Environmental Quality, Michigan Department of Natural Resources – Fisheries Division, USDA-Natural Resources Conservation Service, Herpetological Resource & Management, U.S Fish & Wildlife Service, Prein & Newhof Engineering, Gosling Czubak Engineering, Wilcox Professional Services, Betsie River Watershed Restoration Committee, Krenn Bridge Company



